DOCUMENT RESUME

ED 175 199 EC 120 128

AUTHOR Lowenstein, L. F.
TITLE A Study of Child Arsonists: Their Diagnosis and Treatment.
PUB DATE [79]
NOTE 19p.: Best copy available

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Behavior Change; *Behavior Problems; Emotionally Disturbed; Evaluation Methods; Exceptional Child Research; *Followup Studies; Intervention; Operant Conditioning; *Student Characteristics
IDENTIFIERS *Pyromania

ABSTRACT

To establish diagnostic criteria, 12 fire-raising or pyromaniac children (7-15 years old) were compared with 12 control students matched for age, sex, and intellect. Six diagnostic procedures, including the Wechsler Intelligence Scale for Children, the Lowenstein Fire Raising Diagnostic Test, and the Eysenck Personality Questionnaire, were used to differentiate fire-raising from non fire-raising Ss. Six of the fire-raising Ss participated in three behavior-oriented treatment sessions designed to decondition the behavior through aversion therapy, a reactive inhibition approach, educational therapy, and environmental manipulation and counseling. Among results were that only the Lowenstein Fire Raising Diagnostic Test differentiated the fire-raising from the non fire-raising Ss; that the experimental procedures appeared to be superior to control methods; and that the result was maintained after a 5-year followup. (CL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF E ATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED175199

A Study of Child Arsonists

(Their Diagnosis and Treatment)

-by-

Professor L. F. Lowenstein, M.A., Dip.Psych., Ph.D.

Consultant Psychologist

Professor, College of Preceptors, London.

Visiting Professor, University of Khartoum, Sudan.

Former Chief Educational Psychologist of Hampshire

Presently Director of Lowenstein Therapeutic Units

BEST COPY AVAILABLE

Allington Manor,
Allington Lane,
Fair Oak,
Hants. SO5 7DE.

tel: Fair Oak 2621

EC 120128

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

L. F. Lowenstein

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A Study of Child Arsonists.
(Their Diagnosis & Treatment).

I Backgroup Research:

The research literature has been extremely sparse on thetopic of"pyromania", fireraising, and especially as far as it pertains to children. Despite this there is a great amount of publicity when children are involved in fire raising or arson and especially with the burning down of such buildings as schools. This is undoubtedly due mainly to the fact that such fires are extremely costly in financial terms and appear therefore to be out of proportion to the apparent problems and conflicts faced by the child who is involved in these acts.

The adult attitude towards dealing with a child with fire setting has been studied by Winget and Whiteman (1973). They asked 300 urban adults, as part of an Environmental Health Survey, how they would deal with a child who sets fires. Respondents who were young, of upper socio-economic status, and with numerous interpersonal relationships and low degrees of alienation most frequently gave positive/constructive responses indicating the use of outside resources. However, only about one third of the subjects specified Mental Health professionals.

Axberger (1973) presented an essay on the symbolic nature of fire drawn from the literature of differing cultures and varied historical eras. It was suggested that one cannot understand criminal fire setting, or the psychiatric underlay of pyromania, without a broader recognition of the meanings attached to fire by the people of a culture generally. Fire as a symbol of consuming emotion or of sexuality; fire as the supreme form of God-like destruction; and death which is purified by fire all have served as

identifiable artistic themes or devices in the imaginitive productions of poets and writers of culturally distinct origins. The pathological fire setter may be a person who lacks the facility to represent these primordial human values in the form of art, and instead is forced to translate these deeply unconscious symbolisations into criminal actions.

This was a typical psychoanalytic interpretation similar to that advocated by Laberge (1974), who saw fire raising as an almost sex fetish.

Another, less esoteric explanation was that of Shaver, Schurtman and Blank (1975). These investigators described two studies researching increased number of false alarms, especially from lower income areas, received by urban fire companies during the past three years. In the first study, several environmental variables, in addition to average neighbourhood income, reported harassment of firemen and type of alarm box, were correlated with false alarm frequencies for randomly selected alarm boxes in lower income sections of Brooklyn. Results of a step-wise multiple aggression analysis indicated that:

(a) a linear combination of six environmental variables accounted for 73% of the variance in false alarms;

(b) this relationship was not due simply to differences in average neighbourhood income and

(c) false alarms were geographically associated with harassments.

Results suggested that fire alarms should be interpreted as expressions of protest.

The second study explored the beliefs and attitudes of 442 Ghetto residents and revealed that young non-whites showed most

hostility to the Fire Department. Although most respondents expressed positive attitudes towards firemen, many believed they did unnecessary damage; Some respondents linked this with racialism. Other causes for anger not related to the Fire Department were also mentioned, including the environmental factors.

So much for the causes and associated features to fire setting, these features being taken into consideration when treating children who engage in fire setting.

The viewing of the problem and treatment of children who engage in fire setting has not been studied extensively. Approaches are at least twofold:

1. With a search into sub-conscious motivations, which is favoured by the psychoanalytic school a long period oftreatment would appear to be indicated. Awad and Harrison (1976) reported a case of a 12½ year old female fire setter. The symptoms were the result of long-term developmental problems precipitated by the onset of puberty. Psychoanalytically orientated individual psychotherapy combined with marital and family therapy was the mode of treatment. The continuous struggle to establish a therapeutic alliance with an early adolescent was discussed. It was concluded that a patient whose main mechanisms of defence were repression, suppression, denial and projection a severe challenge was presented to the therapist.

2. Thesecond approach was the behaviourist one such as that used by Demholtz (1973). Here aversion therapy was used. This was also the case for Lowenstein (1976) who used similar methods with a number of unpublished cases. Among the methods used was negative practice with young children associated with aversion therapy. The procedure used was to bring fire setting

responses to extinction. The result was encouraging, especially with young children under the age of 12.

Lowenstein (1977) in a television programme presented some cases and causes as well as preventive aspects and predictive elements to fire raising. A number of treatment approaches were also suggested.

II Present Research:

A The Problem:

Pyromania has been defined by the Cassell English Dictionary as "Insanity manifested in a irresistable desire to destroy by fire". The Oxford Concise Dictionary says nothing more than the pyro maniac is ".....suffering from incendiary mania".

In reality it was first felt that pyromania in it's purest form was compulsive fire raising. It is a very rare condition. It was hypothesised that a fire setting behaviour was associated with one or more of the following:

(a) deeper emotional problems and frustrations or conflicts.

(b) accident proneness.

(c) a low frustration tolerance and a tendency to act without considering the consequences of such behaviour.

Hence fire raising was frequently associated with other maladaptive behaviour.

The research which follows sought to investigate the following hypotheses:

1. Establish some objective cognitive and personality traits associated with children responsible for fire setting as compared with a control group of equivalent age, sex and background.

2. Establish an effective treatment approach and compare this with another matched control that either:

(a) Received alternative treatment or

(b) Received no formal psychological treatment at all.

3. Following the children up for several years to observe whether fire setting behaviour had disappeared or remained. The criteria studied were:

(a) Type of personality traits manifested which had been measured earlier and

(b) The degree of academic, vocational and social success achieved.

B The Introduction to Research:

The study which follows sought to establish certain criteria associated which children who were fire raisers or who have a predisposition to relieve their tensions, frustrations, etc., through fires which they light and which cause the destruction of property. The children were investigated initially on any signs of physical or organic illness and when cleared, were accepted for diagnosis and treatment as subjects in either experimental or control groups.

The children were referred to two separate Child Guidance Clinics in different parts of the country between 1964 and 1974 for fire setting behaviour. Two boys of the sample were assessed and had treatment in a residential setting between 1977 and 1979 where they are still currently (January 1979) in residence.

1. The Method:

The methods were both general and specific. The specific methods used are discussed under the procedure. The main limitations of the study were the small number of subjects involved and the fact that the subjects were almost totally male.

2. General Methods;

(a) Subjects.

12 Fire raising subjects were studied. These were compared with 12 non-fire raising subjects. Of the 12 fire raising subjects six were control and six were in the experimental treatment groups. The total number of male subjects was 10 and the total number of female subjects was two. They varied in age from seven to 15.

(b) Part I

Differentiating fire raising (FR) from non-fire raising (NFR) of children.

All the children studied attended day-school except three. These were three boys in a school for maladjusted children. The fire raising group will henceforth be referred to as FR (n = 12). The non-fire raising group will be referred NFR (n = 12). The 12 children who were fire raisers were therefore compared with the non-fire raising children of the equivalent age, sex and intellect on the basis of intelligence, academic achievement and personality variables.

(c) Part II

Comparing treatment approaches for two groups of fire raising children.

While Part I consisted of assessing the children intensively and comparing fire raising and non-fire raising groups, Part II consisted of comparing treatment approaches between the two groups of fire raising children. The fire raising control group (n = 6) received treatment by a Child Guidance team including a psychiatrist and a psychiatric social worker whose main efforts were directed towards environmental manipulation which sought the removal or reduction of conflict at home.

The fire raising experimental group (FRE) was treated by a variety of individual behaviour therapeutic procedures and other techniques. The aim was to differentiate fire raising from non-fire raising children.

The following diagnostic procedures were used to differentiate fire raising from non-fire raising children:

1. Wechsler Intelligence Test for Children;
2. The Schonell Reading Test;
3. The Schonell Spelling Test;
4. The Lowenstein Arithmetic Test;
5. The Lowenstein Fire Raising Diagnostic Test;
6. The Eysenck Personality Questionnaire (E.P.Q.)

The Lowenstein Fire Raising Diagnostic Test.

This test consists of 12 questions on a true or false basis. Half of the questions are a lie scale and the other half relate to fire raising behaviour (LFRDT).

1. I always do what I am told to do. True/False

2. I have started fires because I am angry with someone or something. True/False

3. I have never and would never steal anything from anyone. True/False

4. I have found several times (at least twice) that I could not control the spread of a fire I started. True/False

5. I never lie. True/False

6. I get quite excited when I see a fire burning. True/False

7. I always tidy up every mess I make at once. True/False

8. I don't feel so angry after I see a fire. True/False

9. Even when nobody is looking I always do the right thing. True/False

10. I like playing with fire. True/False

11. I never break any rules. True/False

12. I don't care how much destruction is caused by fire. True/False

Validity of the Questions:

For obvious reasons a lie scale had to be included in this short diagnostic test in order to ascertain the individuals reporting honestly what he felt. The result of the use of the test indicates that the most valid questions are number 6 and 10. These being always reported in the affirmative by true fire raisers and never by non-fire raisers.

Two thirds validity was achieved by question 4 and 8 with two thirds of fire raisers reporting true while no non-fire raiser reported true. In the case of question 8 all non-fire raisers reported false and two thirds of fire raisers reported true for this question.

Somewhat less valid as a screening device were question 2 and 12, these being reported one third true by fire raisers and always false by non-fire raisers. Hence this test may be seen as a valid short measure of potential fire raising in children.

3. Specific Treatment Methods:

A. Experimental Treatment Group: n = 6

In the study of the experimental group (FRE) it was provided with three sessions of 45 minutes per week with a behaviouristically orientated procedures. The objective was to decondition the fire setting behaviour threugh the establishment of a good relationship and among the specific behaviourist methods employed were:

(a) Aversion Therapy:

(a) Reading about some especially unpleasant reports of injuries received and devastation caused by fire.

(b) Seeing vivid and unpleasant pictures resulting from injuries received from fire.

(c) Listening to tapes of screams of pain while looking at a film about fires.

(d) Lighting flames while being forced to sniff ammonia.

(e) Lighting matches and being forced to hold a match with the eyes shut until in pain and the match is dropped.

(b) Reactive Inhibition Approach:

(a) Being forced to light many fires repeatedly until they tired of this activity.

(b) Being taken to places where fires could be started in safety and the child could practice this behaviour if they wished to doso.

(c) Educational Therapy and Environmental Manipulation and Counselling:

(a) Encouraging and teaching responses to frustrations which were positive and not destructive.

(b) Developing remedial educational programmes for the child

(c) Discussing long-term grievances the child had and problems currently faced.

B. Programme for the Control Group Attending Child Guidance Clinics. n = 6

The programme for the control group attending the Child Guidance Clinic was as follows:

(a) Regular two-weekly visits to a Psychiatrist for play therapy or psychotherapy.

(b) Regular meetings between the P.S.W. and the family of the child.

(c) In some cases psychotherapy based on psychodrama or psychoanalytic therapy.

(d) The emphasis in treatment was on the elimination of the causes of the frustration and conflict eminating from the home or the school.

C. Programme for the Control Group who were non-fire raisers. n = 12

The object of the control group of 12 children who were not fire raisers was merely to compare diagnostically scores on certain tests and observations before and after the treatment period.

Sources of Referral:

Children were referred from the following sources:

Schools	-	9
Parents	-	2
G.Ps. and others	-	1

Results:

1. There is no distinguishing fire raising from non-fire raising children on the basis of personality tests such as the EPQ.

2. I.Q. and attainment could not distinguish between fire raising and non-fire raising children.

3. Only the Lowenstein Fire Raising Diagnostic Test was able to differentiate children who actually were fire raising and had at some point in time burned down fields and buildings, the

4. The most common reasons for the basis of fire raising are:

(a) The excitation caused by fires among fire raising children.

(b) The enjoyment produced by fires.

(c) The ability for children who are of fire raising temperament to be accident prone in the process of playing with fire.

(d) Cathartic effect or the tendency to relieve frustrations through fire setting found among fire raising children.

(e) The tendency of fire raising children to express their anger through the process of starting a fire.

(f) The tendency among fire raising children to feel little guilt about the destruction brought about by the fires they begin.

Conclusions:

1. The only method of identifying fire raising children appears to be a short questionnaire which has within it a lie scale to test the validity of the result.

2. The basic personality tests cannot distinguish between fire raising and non-fire raising children neither can I.Q. or attainment assessment of such children.

Results of Differential Treatment Among Fire Raising Children.

The Table which follows gives the fires started by fire raising children during treatment until it's completion. It may be noted that the experimental group started fewer fires during it's treatment than the control group.

Table

Fires Started During Treatment until it's Completion

Group	No Fires	One Fire	Two or more Fires
Experimental	11	1	0
Control	4	5	3

A follow-up was carried out five years later of the same children to see whether there have been any changes in fire raising behaviour after the end of treatment.

Fire Raising Behaviour Five Years Follow-up

Group	No Fires	One Fire	Two or More Fires
Experimental	12	0	0
Control	6	4	2

There is clearly some difference between the number of fires

commenced by those children having received the behaviour modification or experimental approach compared with those who received the traditional treatment in a Child Guidance Clinic.

Conclusions:

1. The experimental procedures for treating children with fire raising behaviour appears to be superior to that of the control methods.

2. The follow-up indicates that the treatment is maintained after a five year follow-up.

3. The control group also improved over the five year period but not as great as the improvement in the exprimental group. This indicates that there may be some long-term effects of treatment in both the experimental and control groups and the possibility of other factors effecting children including maturation.

4. The Lowenstein Fire Raising Diagnostic Test was also administered to both groups of children five years later and was noted that there was now no significant difference between the two groups of this questionnaire. This indicates that basic attitudes towards fire raising have altered and coincided with behaviour manifested.

BIBLIOGRAPHY

1. AWAD, G.A; HARRISON, S.I. "A Female Fire Setter: A Case Report" Journal of Nervous and Mental Diseases, 1976 (Dec), Vol.163(6), pp.432-437.

2. AXBERGER, G. "The Incendiary In Reality and Imagination". Annales Medico Psychologi-gues, 1973 (Jan), Vol.1(9), pp.1-25.

3. DENHOLTZ, M.A. "At Home: Aversion Treatment of Compulsive Fire Setting Behaviour: Case Report". In R. D. Rubin, H. Fensterheim, J. D. Henderson and L. P. Ullman (Eds) Advances in Behaviour Therapy: Proceedings of the Fourth Conference of the Association for Advancement of Behaviour Therapy. New York, New York Academic Press, 1972, xv 233p.

4. LABERGE, P. "A Case of Fire-Fetishism" Information Psychiatrigue, 1974 (Dec), Vol.50(10), pp.1021-1024.

5. LOWENSTEIN, L.F. "Young Pyromaniacs Treated by Behaviour Therapeutic Procedures". Unpublished Case Studies, 1976.

6. LOWENSTEIN, L.F. "Vandalism and Pyromania". Man Alive Programme, BBC 2, London, 10.6.77.

7. SHAVER, P; SCHURTMAN, R. and BLANK, T.O. "Conflict Between Firemen and Ghetto Dwellers: Environmental And Attitudinal Factors". Journal of Applied Social Psychology, 1975 (July-Sept), Vol.5(3), pp.240-261.

8. WINGET, C.N. and WHITEMAN, R. M. "Coping with Problems: Attitudes Towards Children Who Set Fire". American Journal of Psychiatry, 1973 (Apr), Vol.130(4), pp.442-445.